

WAR 304161

# Stormwater Pollution Prevention Plan (SWPPP)

American Petroleum  
Environmental Svcs

401 E. Alexander Ave  
Tacoma WA 98421

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## Section 1 Introduction and Administrative Requirements

### Introduction

The U.S. Environmental Protection Agency (USEPA) published regulations in November 1990 to control stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) permit program. The goal of the stormwater regulations is to improve water quality by reducing the amount of pollutants contained in stormwater runoff. To help accomplish this goal, industrial facilities subject to an NPDES stormwater discharge permit must prepare and implement a Stormwater Pollution Prevention Plan (SWPPP).

The NPDES regulations set forth conditions for delegation of permitting authority to states. The State of Washington has obtained such authority for the issuance of stormwater discharge permits. In November 1992, the Washington State Department of Ecology (Ecology) issued the first Baseline General Permit (ISGP) for stormwater discharges at industrial facilities. Ecology determines ISGP coverage requirements based on the Standard Industrial Classification (SIC) code of the Facility and requires the Facility operator to be the Permittee.

American Petroleum Environmental Services (American) submitted a Notice of Intent (NOI) and received coverage under the ISGP on May 31, 2016, permit number WAR304161. Department of Ecology has determined that the location at 401 East Alexander Ave, Tacoma WA 98421 that is operated by American requires ISGP coverage. This SWPPP addresses operations at the American facility and was prepared to address requirements of the ISGP.



## **SWPPP Objectives and Requirements**

### **SWPPP Objectives:**

- To provide all known, available, and reasonable methods of prevention, control and treatment (AKART) of stormwater pollution.
- To ensure the discharge does not cause or contribute to a violation of Water Quality Standards.
- To eliminate the discharges of unpermitted process water, domestic waste water, noncontact cooling water, and other illicit discharges to stormwater drainage systems.

## SWPPP Requirements

Table 1 Summary of SWPPP Deliverables

Permit Section	Submittal	Frequency	Due Date(s)
<b>S3.A.4.</b>	SWPPP Certifications/Updates	As necessary	Within 30 days of inspection
<b>S3.B.5</b>	Training	Annual	Annual
<b>S7.A.</b>	Inspection	Monthly	Logbook only unless requested
<b>S9.A.</b>	Discharge Monitoring Reports (DMRs)	1/quarter	within 45 days after the end of each quarter
<b>S9.B.</b>	Annual Report	1/year	May 15th (except 2010)
<b>S9.E</b>	Permit Violations	As necessary	Immediate by phone; Detail report w/n 5 days
<b>S9.F</b>	SWPPP, if requested by Ecology	Per Ecology request	Within 14 days of request
<b>G21.</b>	Anticipated Noncompliance Notification	As necessary	Within 30 days of noncompliance event

## **Pollution Prevention Team**

The Permit requires the formation of a Pollution Prevention Team and establishes responsibilities for inspections, operation and maintenance, and contacts for emergencies. Table 2 identifies the team members.

**Table 2 Pollution Prevention Team Members**

Staff Names and/or Title	Individual Responsibilities
Byron Jerome	All administrative requirements of the permit; compliance; monitoring plan; BMP selection; reporting; corrective actions
<del>Gene Mazza</del>	<del>Facility Director/Operator</del>
Maul Foster & Alongi Inc. Levi Fernandes	Monthly inspections and monitoring

## **SWPPP Training Plan**

### **Purpose**

This training plan is designed to provide guidelines for the Stormwater Pollution Prevention Plan Training curriculum at American Petroleum. This training will meet the requirements of the following regulations and permits:

- Industrial Stormwater General Permit, Department of Ecology, effective date January 2, 2015
- Stormwater Management Manual for Western Washington, Department of Ecology, 2014
- Clean Water Act, EPA

### **Scope**

This training is intended for all personnel working on a site, their supervisors, management, and anyone authorized on the site that who have duties in areas of industrial activities subject to the permit.

### **Objectives**

- (1) To standardize mandatory training that is in compliance with the regulatory requirements.
- (2) To implement a suitable training schedule to insure all personnel have the opportunity to attend training.
- (3) To provide site-specific training as required by regulation, which includes technical curriculum, specific equipment and appropriate facilities.
- (4) To insure personnel are properly trained and knowledgeable in the areas specified in the Industrial Stormwater General Permit, Stormwater Pollution Prevention Plan and Spill Prevention and Emergency Cleanup Plan.

### **Recordkeeping**

Annual training presentations and sign-in sheets will be filed as an attachment to the SWPPP and located under the Records section of the SWPPP Logbook.

## Section 2 Facility Description and Contact Information

### Facility Description

Table 3 Facility Information

Facility Information	
American Petroleum Environmental Svcs 401 East Alexander Ave Tacoma, WA 98421 County: <u>Pierce</u> Permit Number: <u>WAR304161</u>	
Latitude: 47.278795° N	Longitude: 122.410687° W
Estimated area of industrial activity at site exposed to stormwater: 0.6 (acres)	
Discharge Information	
Does this facility discharge stormwater into surface waters? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Does this facility discharge stormwater into a municipal storm water conveyance system? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
SIC Code(s): <u>4731</u>	

### Facility Contact Information

Table 4 Name and contact information

Name	Phone	Email
Mike Mazza	Ex. 6 - Personal Privacy	mmazza@apes-inc.com
Byron Jerome	Ex. 6 - Personal Privacy	byron@apes-inc.com
Gene Mazza	Ex. 6 - Personal Privacy	emazza@apes-inc.com
Jill Schlosser	Ex. 6 - Personal Privacy	Jill.schlosser@ecoluberecovery.

*Figure 1 Vicinity Map*



### Section 3 Facility Assessment



Figure 2 Facility Footprint

American has one drainage area associated with the facility footprint. Pollutants of concern for this facility are Zinc, Copper, Oil, Turbidity and materials that could alter pH.

#### Drainage Basin 1

The drainage area consists of two catch basins, which provide conveyance for three downspouts and sheet flow from the parking area. CB1 is the sample location for this facility. Even though CB2 is the locations where it discharges off site, the stormwater is comingled with flows coming from neighboring facilities; therefore, it is not a suitable representative sample location. See SWPPP map for drainage details.

Drainage Basin 1	Location	
	Latitude	Longitude
CB1	47.278471°	-122.410730°
CB2	47.278471°	-122.410465°

Industrial Activities: The majority of the drainage area issued primarily as a paved roadway/employee parking. There are no industrial activities conducted outside the building.

Exposed Materials: None

Table 5 Operational Source Control BMPs by Drainage Area

OPERATIONAL SOURCE CONTROL BMPs	
BMP/Drainage Basin	BMP#
<b>Good Housekeeping</b>	<b>MAN</b>
Clean up spills immediately	
Vacuum paved surfaces	
<b>Preventive Maintenance</b>	<b>MAN</b>
Catch basins cleaned	
<b>Spill Prevention</b>	<b>MAN</b>
Spills addressed immediately upon discovery	
Spill notifications	
Maintain spill log	
Illicit Connections	S410
<b>Maintenance Standards implemented</b>	
<b>Required site-specific BMPs per ACTIVITY</b>	
<b>Loading and Unloading Areas</b>	S412
<b>SW Infrastructure maintenance</b>	S417
<b>Building drains</b>	S424



## **Section 4. Best Management Practices**

This section details the best management practices (BMPs) for operational, structural, and treatment source control. The selection of BMPs described in this section are those required by the permit, including the BMPs listed as “applicable” in Ecology’s Stormwater Management Manual (SWMM), and those based on land use and the pollutant generating sources. Some of the Pollutant Source-Specific (“applicable”) BMPs listed in the SWMM are not detailed in this section as the pollutant source or activity is not present at the Facility.

### **Operational Source Control**

Operational Source Control BMPs are non-structural practices that prevent or reduce pollutants from entering stormwater. Operational Source Control BMPs are considered the most cost-effective pollutant minimization practices.

### **Best Management Practices**

The following is a list of the permit-required BMPs and the activity specific BMPs. The BMPs are broken down by applicable tasks associated with the BMPs. A schedule of inspections and maintenance is provided at the end of the section.

#### **Good Housekeeping**

- Paved surfaces will be vacuumed with vacuum sweeper to remove accumulated pollutants a minimum of ~~quarterly~~ <sup>Monthly</sup>. See Table 6 for current schedule.   
*as of April 2018*
- Dust control methods will be employed in the event dust becomes an issue. The entire site is paved; sources of dust include the dirt and debris carried by the wind and mobile vehicles.

#### **Preventive Maintenance**

- Catch basins will be cleaned when the debris depth reaches 60% of the sump depth. The debris surface will be kept 6 inches below pipe outlet.
- Equipment and vehicles will be inspected monthly for leaking fluids such as oil, antifreeze, etc. Leaky equipment will be taken out of service. The service schedule will be annotated on the monthly inspection form.

### **Spill Prevention and Emergency Cleanup Plan**

- Spills will be addressed immediately upon discovery.
- All stored chemical liquids, fluids and petroleum will be stored on impervious surfaces, surrounded by secondary containment capable of containing 110% of the largest container volume.
- Notifications will be made to Ecology and the local sewer authority immediately if a spill reaches a sanitary or a storm sewer, ground water, or surface water.

### **Employee Training**

Employee training will be conducted at a minimum of annually. Training will be site specific for employees that have duties in areas of industrial activities as listed in section 3.0 of the SWPPP. The training includes an overview of the SWPPP; how employees make a difference in complying with the SWPPP and preventing contamination of stormwater; spill response procedures, good housekeeping, maintenance and material management practices. The Training Plan details the requirements of employee training, the schedule and copies of completed training.

### **S410 BMPs for Illicit Connections to Storm Drains**

- Eliminate unpermitted wastewater discharges to storm sewer, ground water, or surface water.
- Convey unpermitted discharges to a sanitary sewer if allowed by the local sewer authority, or to other approved treatment.
- Obtain appropriate state and local permits for these discharges.

Illicit discharges will be identified and controlled as part of the monthly inspection checklist in Appendix E.

### **Maintenance Standards**

Maintain tanks, vaults, catch basins, oil/water separators, drains and other

stormwater drainage/treatment devices in accordance with the Maintenance Standards checklists found in Appendix C.

### **Additional Operational BMPs Implemented based on Industrial Activities**

#### **S412 BMPs for Loading and Unloading Areas for Liquid or Solid Material**

Loading/Unloading Areas:

- All loading and unloading activities are conducted indoors with no exposure to stormwater.
- Place drip pans, or other appropriate temporary containment device, at locations where leaks or spills may occur such as hose connections, hose reels and filler nozzles. Drip pans shall always be used when making and breaking connections (see SWMM Volume IV Figure 2.2). Check loading/unloading equipment such as valves, pumps, flanges, and connections regularly for leaks and repair as needed.
- Report spills of Reportable Quantities (Code of Federal Regulations Title 40 Parts 302.4 and 117) to Ecology. To report a spill or to determine if a spill is a substance of a Reportable Quantity, call Ecology's Southwest Regional Office (360-407-6300) or Headquarters (360-407-6300) and ask for an oil spill operations or a hazardous waste specialist. Also refer to "Emergency Spill Response in Washington State", Publication # 97-1165-CP.
- Prepare and implement an Emergency Spill Cleanup Plan for the facility (BMP Spills of Oil and Hazardous Substances) which includes the following BMPs: – Ensure the clean-up of liquid/solid spills in the loading/unloading area immediately, if a significant spill occurs, and, upon completion of the loading/unloading activity, or, at the end of the working day.– Retain and maintain an appropriate oil spill cleanup kit on-site for rapid cleanup of material spills. (See BMP Spills of Oil and Hazardous Substances). - Ensure that an employee trained in spill containment and cleanup is present during loading/unloading.

Transfer of Small Quantities from Tanks and Containers:

Refer to BMPs for Storage of Liquids in Permanent Above-Ground Tanks, and Storage of Liquid, Food Waste, or Dangerous Waste Containers, for requirements on the transfer of small quantities from tanks and containers, respectively.

**S417 BMPs for Maintenance of Stormwater Drainage and Treatment Systems:**

- Maintain stormwater treatment facilities according to the O & M procedures presented in Section 4.6 of Volume V. in addition to the following BMPs.
- Promptly repair any deterioration threatening the structural integrity of the facilities. These include replacement of clean-out gates, catch basin lids, and rock in emergency spillways.
- Ensure that storm sewer capacities are not exceeded and that heavy sediment discharges to the sewer system are prevented.
- Regularly remove debris and sludge from BMPs used for peak-rate control, treatment, etc. and discharge to a sanitary sewer if approved by the sewer authority or truck to a local or state government approved disposal site.
- Post warning signs; "Dump No Waste - Drains to Ground Water," "Streams," "Lakes," or emboss on or adjacent to all storm drain inlets where practical.
- Disposal of sediments and liquids from the catch basins must comply with "Recommendations for Management of Street Wastes" described in SWMM Appendix IV-G.
- Alter the activity by eliminating or minimizing the contamination of stormwater.

**S421 BMPs for Parking and Storage of Vehicles and Equipment:**

- Do not hose down the area to a storm drain or to receiving water.
- Sweep parking lots, storage areas, and driveways, regularly to collect dirt, waste, and debris.

**S424 BMPs for Roof/ Building Drains at Manufacturing and Commercial Buildings**

- If leachates and/or emissions from buildings are suspected sources of stormwater pollutants, then sample and analyze the stormwater draining from the building.
- Sweep the area routinely to remove any zinc residuals.
- If a roof/building stormwater pollutant source is identified, implement appropriate source control measures such as air pollution control equipment, selection of materials, operational changes, material recycle, process changes, etc.

**S426 BMPs for Spills of Oil and Hazardous Substances:**

- Train key personnel in the implementation of the Emergency SCP. Prepare a summary of the plan and post it at appropriate points in the building, identifying the spill cleanup coordinators, location of cleanup kits, and phone numbers of regulatory agencies to be contacted in the event of a spill.
- Update the SCP regularly.
- Immediately clean up spills. Do not use emulsifiers for cleanup unless an appropriate disposal method for the resulting oily wastewater is implemented. Absorbent material shall not be washed down a floor drain or storm sewer.
- Locate emergency spill containment and cleanup kit(s) in high potential spill areas. The contents of the kit shall be appropriate for the type and quantities of chemical liquids stored at the facility.

**S427 BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers:**

- Place drip pans beneath all mounted container taps and at all potential drip and spill locations during filling and unloading of containers.
- Inspect container storage areas regularly for corrosion, structural failure, spills, leaks, overfills, and failure of piping systems. Check containers daily for leaks/spills. Replace containers, and replace and tighten bungs in drums as needed.
- Businesses accumulating Dangerous Wastes that do not contain free liquids need only to store these wastes in a sloped designated area with the

containers elevated or otherwise protected from storm water run-on.

- Drums stored in an area where unauthorized persons may gain access must be secured in a manner that prevents accidental spillage, pilferage, or any unauthorized use (see SWMM Volume IV Figure 2.9).
- If the material is a Dangerous Waste, the business owner must comply with any additional Ecology requirements as specified in SWMM Appendix IV-D R.3.
- Storage of reactive, ignitable, or flammable liquids must comply with the Uniform Fire Code (SWMM Appendix IV-D R.2).
- Cover dumpsters, or keep them under cover such as a lean-to, to prevent the entry of stormwater. Replace or repair leaking garbage dumpsters.
- Drain dumpsters and/or dumpster pads to sanitary sewer. Keep dumpster lids closed. Install waterproof liners.



## Implementation schedule

Table 6 Implementation and Inspection Schedules

OPERATIONAL SOURCE CONTROL BMPs						
BMP	INSTALLED/ IMPLEMENTED	WEEK	MONTH	QUARTER	ANNUAL	AS Needed
<b>Good Housekeeping</b>	Y					
Clean up spills immediately	Y					X
Vacuum paved surfaces	Y		X	<del>X</del>		
Dust control						X
<b>Preventive Maintenance</b>	Y					
Catch basins cleaned	Y		X			X
Drip pans under leaky vehicles						X
<b>Spill Prevention</b>	Y					
Spills addressed immediately upon discovery						X
Secondary containment of stored chemicals and fuel 110% of largest container volume			X			
Spill notifications						X
Maintain spill log			X			
Illicit Connections			X			
<b>Maintenance Standards implemented</b>			X			
Promptly repair/replace/reseal damaged paved areas at industrial facilities						X

As of April 2018

Prevent the discharge of unpermitted liquid or solid wastes, process wastewater, and sewage to ground or surface water, or to storm drains that discharge to surface water, or to the ground.						X
Loading and Unloading Areas			X			
SW Infrastructure maintenance					X	X
Parking & Storage of vehicles & equipment			X			
Building drains			X			



## **Structural Source Control**

Structural Source Control BMPs are physical, structural, or mechanical devices or facilities that are intended to prevent pollutants from entering stormwater. All industrial activities at this facility are conducted inside the building.

### **Additional Structural BMPs Implemented**

#### **S412 BMPs for Loading and Unloading Areas for Liquid or Solid Material**

At All Loading/ Unloading Areas:

- Consistent with Uniform Fire Code requirements (SWMM Appendix IV-D R.2) and to the extent practicable, conduct unloading or loading of solids and liquids in a manufacturing building, under a roof, or lean-to, or other appropriate cover.

#### **S424 BMPs for Roof/ Building Drains at Manufacturing and Commercial Buildings**

Paint/coat the galvanized surfaces as described in Ecology Publication # 08-10-025.

#### **S427 BMPs for Storage of Liquid, Food Waste, or Dangerous Waste Containers:**

- Keep containers with Dangerous Waste, food waste, or other potential pollutant liquids inside a building unless this is impracticable due to site constraints or Uniform Fire Code requirements.
- Store containers in a designated area, which is covered, bermed or diked, paved and impervious in order to contain leaks and spills.
- The secondary containment shall be sloped to drain into a dead-end sump for the collection of leaks and small spills.
- For liquid wastes, surround the containers with a dike. The dike must be of sufficient height to provide a volume of 10 percent of the total enclosed container volume or 110 percent of the volume contained in the largest container, whichever is greater, or, if a single container, 110 percent of the volume of that container.
- Where material is temporarily stored in drums, a containment system can be in lieu of the above system.
- Place containers mounted for direct removal of a liquid chemical for use by employees inside a containment area as described above. Use a drip pan during liquid transfer.

## Implementation Schedule

Table 7 BMP implementation and Inspections

STRUCTURAL BMPs		MAINTENANCE SCHEDULE				
BEST MANAGEMENT PRACTICE	INSTALLED/IMPLEMENTED	WEEK	MONTH	QUARTER	ANNUAL	CUSTOM
Loading and unloading areas	Y		X			
Under cover	Y		X			
Storage of liquids	Y		X			
Store indoors	Y		X			
Secondary containment	Y		X			
Drip pans during liquid container transfer	Y		X			

## Treatment Source Control

Specific Treatment Source Control BMPs that are required by the permit and are applicable to particular pollutant sources, such as fueling stations, railroad yards, storage and transfer of materials, etc. are described below. Train designated employees on appropriate separator operation, inspection, record keeping, and maintenance procedures. Ecology submittal/approval process for treatment BMPs that include the addition of chemicals.

### Treatment type

- Oil/Water separation, booms, skimmers or other methods to eliminate or minimize oil and grease contamination.

Table 8 Treatment BMPs by Drainage Area

Treatment BMPs		
AKART BMP/Drainage Basin	BMP#	DB1
Oil/Water Separator	T11.11	X

## Operations and Maintenance Requirements

### Oil/Water Separator

The O & M for this unit is the responsibility of the Port of Tacoma Maintenance Equipment Manager and is on a routine annual schedule and performed by a vendor/contractor.

### Stormwater Peak Runoff Rate and Volume Control

Stormwater Peak Runoff Rate and Volume Control BMPs are not required because the Facility is not a "new development" or "redevelopment" and because the Port of Tacoma (tideflats) area lacks significant elevation change that would require these BMPs.

## Section 5. Stormwater and Catch Basin Sediment Monitoring Plan

### Stormwater Monitoring

Table 1 outlines the analyses required by the ISGP for this facility.

Table 9 Benchmarks and Analysis

Parameter	Units	Benchmark Value	Analytical Method	Laboratory Quantitation Level
Turbidity	NTU	25	EPA 180.1 Meter	0.5
pH	SU	Between 5.0 - 9.0	Meter/Paper	±0.5
Oil Sheen	Yes/No	No visible sheen	N/A	N/A
Copper, Total	µg/L	14	EPA 200.8	2
Zinc, Total	µg/L	117	EPA 200.8	2.5
Petroleum Hydrocarbons	mg/L	10	ECY NWTPH Dx	0.1
Total Suspended Solids	mg/L	30	SM2540-D	5

#### Comparison to Benchmarks

The benchmarks are not water quality standards or permit limits. They are indicator values that are considered unlikely to “*cause or contribute to a water quality violation*”.

Sample results for a stormwater discharge event will be compared to benchmarks detailed in Table 1 above to determine if the results are above or below each parameter's benchmark level. If the result for a specific parameter exceeds the associated benchmarks, the actions specified in Condition S8 (Corrective Actions) of the ISGP and Section 6 of the SWPPP will be taken.

If more than one sample is taken per quarter, the average of the samples will be compared to benchmarks as above.

### **Consistent Attainment of Benchmarks**

Consistent Attainment of benchmarks is defined as eight (8) consecutive quarters where the reported values are equal to or less than the benchmarks values. However, if there was a quarter where a sample should have been taken and was not, the tally resets to zero.

Conducting sampling for the parameters that have reached Consistent Attainment will resume three (3) years from the date the parameters were suspended. Oil sheen does not qualify for Consistent Attainment and it must be observed and documented every quarter.

### **Sampling Timing and Frequency**

All parameters must be sampled no less than once per quarter. Additional samples taken during the quarter will be averaged for reporting on the Discharge Monitoring Report. If more than one sample is taken within a 24 hour period, the daily average will be calculated then used to calculate the quarterly sample results.

Representative samples will be obtained by collecting grab samples from the Discharge Monitoring Point identified in Section 3. Updates to the Discharge Monitoring Point will be submitted using the *Industrial Stormwater General permit Discharge/Sample Point Update* Form found on the Department of Ecology website <http://www.ecy.wa.gov/programs/wq/stormwater/industrial/permitteehelp.html>

Stormwater discharge will be sampled from the designated location(s) on the following schedule:

Table 10 Schedule

<b>1st Quarter</b>	January, February, March
<b>2nd Quarter</b>	April, May, June
<b>3rd Quarter</b>	July, August, September
<b>4th Quarter</b>	October, November, December

Stormwater discharge sample(s) will be taken from the first fall storm event after October 1<sup>st</sup>.

Samples will be collected within the first 12 hours of discharge. Documentation of the event will be annotated on the Discharge Sampling Form.

Sampling will not occur during unsafe conditions or outside of regular business hours or during quarters where there is not discharge.

Pollution Prevention team staff responsible for conducting sampling activities are identified in Section 1 of the SWPPP.

## Sample Collection and Handling Procedures

### Sample Containers, Holding Time and Preservatives

Samples must be placed in appropriate sample containers, properly preserved and stored, and traceable (trackable) from the time of the sample collection until sample data is received from the lab. Therefore, written records (e.g. chain-of custody and field sampling form) must be completed for each sample event associated with collection, transport, storage and analytical activities.

Parameters, analytical methods, containers, preservation methods and holding times associated with the analysis to be performed are listed below. Samples will be preserved as specified in the applicable test method

Table 11 Sample requirements

Parameter	Analytical Method	Container	Preservative	Holding Time
Turbidity	EPA 180.1 Meter	Glass vial	None	48 hours
pH	Meter/Paper	in situ	None	N/A
Oil Sheen	N/A	in situ	None	N/A
Copper, Total	EPA 200.8	125 mL/plastic	Nitric Acid	6 months
Zinc, Total	EPA 200.8	125 mL/plastic	Nitric Acid	6 months
Petroleum Hydrocarbons	ECY NWTPH Dx	1000 mL/Amber	Hydrochloric Acid	7 days unpreserved/ 14 preserved
Total Suspended Solids	SM2540-D	500 mL/plastic	None	7 days

### Sample Collection

Sample collection procedures and techniques are as follows:

- Disposable powder-free gloves will be worn when sampling.
- pH shall be determined in the field using the pH meter
- Turbidity shall be determined in the field using the Hach 2500 Turbidity meter. Turbidity meter will be calibrated prior to each sampling event.
- Sample collection containers specific for each analysis to be performed will be obtained from the lab.

- When holding the sample bottle, keep hands away from the opening in order to prevent contamination of the sample.
- Collect grab sample where the water has a moderate flow and some turbulence, so that the stormwater discharge will be well mixed and the sample will be representative.
- Collect grab sample from a central portion of the stormwater flow, avoid touching the bottom or sides of channels or pipes.
- **When collecting TPH sample, fill bottle to the top, do not leave an air gap.**
- Collect sample directly from the stormwater flow using the sample container or by using a decontaminated swing sampler. The following procedure for collecting with the sample bottle:
  - Hold the bottle with its opening facing upstream so that the water enters directly into the bottle and does not first flow over the bottle and into your hands.
  - When samples are collected from a water surface, the bottle should plunge below the surface in a sweeping arc and then bring it upward through to the water surface again.
  - Do not overfill the bottles
- The following is the procedure for collecting a sample using a swing (grab) sampler:
  - Decontaminate the grab sampler using biodegradable soap and distilled water between each sample taken.
  - Collect stormwater using the grab sampler by dipping the sampler into the stormwater flow with the opening facing upstream and transfer the stormwater sample to container, avoid overfilling bottles that contain preservative.
  - Cap the bottle after sample is collected, do not touch inside of the lid.
  - Sample labels will be filled out with waterproof ink at the time of sample collection and placed onto the sample bottles
  - Sample bottles will be labeled with the following information"
    - Source
    - Sample location or identification
    - Sample type (grab or composite)
    - Analytes
    - Preservative
    - Sample date and time
    - Name of Sampler
  - **The bottle will be placed on ice in a cooler for temporary sample storage.**

### Sample Documentation

Sample event will be recorded on the stormwater sampling form always and the inspections for if applicable. The stormwater sampling for can be found in Appendix C, Blank Forms. The following information must be filled out of the Sampling Form:



- Sample location (Monitoring Point number)
- Sample date/time
- Notation whether the sample was collected within the first 12 hours of discharge.
- Method of sample collection (grab, composite, time-weighted average)
- Name of sampler

The form may also include:

- Influent sample collection information
- Number and type of samples collected
- Field measurement results (pH and turbidity)
- Unusual circumstances that may affect sample results
- Comments/Notes

### **Sample Packaging and Storage**

If shipping samples to an out-of town laboratory, sample containers will be securely packed inside plastic coolers. Each sample jar will be wrapped in bubble wrap or Styrofoam packaging material and placed on absorbent pads (if water is present in samples) or other suitable packing material that has been placed in the bottom of the cooler. Ice/ice packs will be placed in the cooler to keep samples cold. If shipping long distances, dry ice should be used. Packing material will be added to fill the cooler completely and secure sample containers in an upright position. The original Chain-of-Custody analysis request form(s) will be enclosed in a plastic Ziploc type bag and placed inside the cooler. The cooler will be closed, and fiber tape will be wrapped around the cooler for shipment.

### **Chain-of-Custody Procedures**

Prior to transfer of samples offsite, a chain-of-custody (COC) form will be completed. The COC form will include the sample identification, sample type, date and time of collection, the specific analysis to be performed, and the signature of the sample collector. Samples will be transported to the lab with the completed COC. The lab specified for this facility:

Spectra Laboratories  
2221 Ross Way  
Tacoma WA 98421  
(253) 272-4850

An original COC will remain with the samples during storage and analysis and will be forwarded with the lab data packages to the Port of Tacoma for quality assurance/quality control (QA/QC) of data.

The sample custodian at the lab will sign the COC upon receipt of the samples and note the condition of each sample received upon entry of the sample into the lab logbook.



Any discrepancies will be reported to the QA officer.

Laboratory reports must include the following information:

- Parameter name
- CAS number, if applicable
- Analytical method
- Individual who performed the analysis
- Method detection limit (MDL)
- Laboratory quantitation level (QL) achieved by the lab
- Reporting units
- Sample result
- QA/QC data

Once data is received from the lab, the original laboratory reports will be filed in the SWPPP under the Records tab. See Section 7 in the SWPPP for recordkeeping requirements.

## **Section 6. Corrective Actions**

### **Level 1 Corrective Actions**

A Level One Corrective Action will be completed each time any of the benchmarks for any parameter is exceeded.

The following are the steps taken for the Level One Corrective Action:

1. Within 14 days of receipt of sampling results that indicate a benchmark exceedance for a given quarter 7; or, for parameters other than pH or visible oil sheen, the end of the quarter, whichever is later:
  - a. Conduct an inspection to investigate the cause.
  - b. Review the SWPPP and ensure that it fully complies with Permit Condition S3, and contains the correct BMPs from the applicable Stormwater Management Manual.
  - c. Make appropriate revisions to the SWPPP to include additional Operational Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.
2. Summarize the Level 1 Corrective Actions in the Annual Report
3. **Level One Deadline:** Fully implement the revised SWPPP no later than the DMR due date for the quarter benchmark was exceeded.

### **Level 2 Corrective Actions**

A Level Two Corrective Action will be completed when a benchmark is exceeded for any two quarters during the calendar year.

The following are the steps taken for the Level Three Corrective Action:

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3.
2. Make appropriate revisions to the SWPPP to include additional Structural Source Control BMPs with the goal of achieving the applicable benchmark value(s) in future discharges.
3. Summarize the Level 2 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B).

4. **Level 2 Deadline:** The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable Stormwater Management Manual as soon as possible, but no later than August 31st the following year.
- a. If installation of necessary Structural Source Control BMPs is not feasible by August 31st the following year, Ecology may approve additional time by approving a Modification of Permit Coverage.
  - b. If installation of Structural Source Control BMPs is not feasible or not necessary to prevent discharges that may cause or contribute to a violation of a water quality standard, Ecology may waive the requirement for additional Structural Source Control BMPs by approving a Modification of Permit Coverage.
  - c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to Ecology in accordance with Condition S2.B, by May 15<sup>th</sup> prior to Level 2 Deadline. Ecology will approve or deny the request within 60 days of receipt of a complete Modification of Coverage request.
  - d. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.
  - e. For the year following the calendar year the Permittee triggered a Level 2 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

### **Level 3 Corrective Actions**

A Level Three Corrective Action will be completed when a benchmark is exceeded for any three quarters during the calendar year.

The following are the steps taken for the Level Three Corrective Action:

1. Review the SWPPP and ensure that it fully complies with Permit Condition S3, and contains the correct BMPs from the applicable Stormwater Management Manual.
2. Make appropriate revisions to the SWPPP to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges. Revisions shall include additional operational and/or structural source control BMPs if necessary for proper performance and maintenance of *Treatment BMPs*
  - a. A *Qualified Industrial Stormwater Professional* shall review the revised SWPPP, sign the SWPPP Certification Form, and certify that it is reasonably expected to meet the ISGP benchmarks upon implementation. Upon written request Ecology may, one time during the permit cycle, waive this requirement on a case-by-case basis if a Permittee demonstrates to Ecology's satisfaction that the proposed Level 3 treatment BMPs are reasonably expected to meet ISGP benchmarks upon implementation.
3. Before installing treatment BMPs that require the site-specific design or sizing of structures, equipment, or processes to collect, convey, treat, reclaim, or dispose of industrial stormwater; the Permittee shall submit an engineering report to Ecology for review.
4. The engineering report must include:
  - a. Brief summary of the treatment alternatives considered and why the proposed option was selected. Include cost estimates of ongoing operation and maintenance, including disposal of any spent media;
  - b. The basic design data, including characterization of stormwater influent, and sizing calculations of the treatment units;
  - c. A description of the treatment process and operation, including a flow diagram;
  - d. The amount and kind of chemicals used in the treatment process, if any.  
Note: Use of stormwater treatment chemicals requires submittal of Request for Chemical Treatment Form;

- e. Results to be expected from the treatment process including the predicted stormwater discharge characteristics;
  - f. A statement, expressing sound engineering justification through the use of pilot plant data, results from similar installations, and/or scientific evidence that the proposed treatment is reasonably expected to meet the permit benchmarks; and
  - a. Certification by a licensed professional engineer.
- 5. The engineering report shall be submitted no later than the May 15<sup>th</sup> prior to the Level 3 deadline, unless an alternate due date is specified in an order.
- 6. An Operation and Maintenance Manual (O&M Manual) shall be submitted to Ecology no later than 30 days after construction/installation is complete; unless an alternate due date is specified in an order.
- 7. Summarize the Level 3 Corrective Actions (planned or taken) in the Annual Report (Condition S9.B). Include information on how monitoring, assessment or evaluation information was (or will be) used to determine whether existing treatment BMPs will be modified/enhanced, or if new/additional treatment BMPs will be installed.
- 8. Level 3 Deadline: The Permittee shall sign/certify and fully implement the revised SWPPP according to Permit Condition S3 and the applicable Stormwater Management Manual as soon as possible, but no later than September 30<sup>th</sup> the following year.
  - a. If installation of necessary Treatment BMPs is not feasible by the Level 3 Deadline; Ecology may approve additional time by approving a Modification of Permit Coverage.
  - b. If installation of Treatment BMPs is not feasible or not necessary to prevent discharges that may cause or contribute to violation of a water quality standard, Ecology may waive the requirement for Treatment BMPs by approving a Modification of Permit Coverage.
  - c. To request a time extension or waiver, a Permittee shall submit a detailed explanation of why it is making the request (technical basis), and a Modification of Coverage form to Ecology in accordance with Condition

S2.B, by May 15<sup>th</sup> prior to the Level 3 Deadline. *Ecology* will approve or deny the request within 60 days of receipt of a complete *modification of Coverage* request.

- d. While a time extension is in effect, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.
- e. For the year following the calendar year the Permittee triggered a Level 3 corrective action, benchmark exceedances (for the same parameter) do not count towards additional Level 2 or 3 Corrective Actions.

## **Section 7. Inspections, Reporting and Recordkeeping**

### **Inspections**

#### **Frequency**

Visual inspections shall be conducted on the site each month and documented on the Monthly Inspection Checklist (blank forms located in Appendix E).

#### **Personnel**

Inspections shall be conducted by qualified personnel.

### **Inspection Components**

Each inspection shall include:

- Observations made at stormwater sampling locations and areas where stormwater associated with industrial activity is discharged off-site; or discharged to waters of the state, or to a storm sewer system that drains to waters of the state.
- Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in the stormwater discharge(s).
- Observations for the presence of illicit discharges such as domestic wastewater, contact cooling water, or process wastewater (including leachate).

**If an illicit discharge is discovered, notification to Ecology will be made within seven days and will be eliminated within 30 days.**

- Verification that descriptions of potential pollutant sources are accurate.
- Verification that the site maps in the SWPPP reflect current conditions.
- Assessment of all BMPs that have been implemented, noting all of the following:
  - Effectiveness of BMPs inspected.
  - Locations of BMPs that need maintenance.
  - Reason maintenance is needed and a schedule for maintenance.

- Locations where additional or different BMPs are needed and the rationale for the additional or different BMPs.

## **Inspection Results**

Inspection results will be annotated on the Monthly Inspection Checklist. The checklist will be used to assess, modify and update the BMPs associated with site activities. The Monthly Inspection Checklist will be certified, reviewed by management, and signed. Originals will be kept in the SWPPP logbook.

## **Reporting**

All reports shall be submitted to Ecology electronically through WebDMR. This facility is registered.

## **Discharge Monitoring Reports**

The Permittee shall submit sampling data obtained during each reporting period on a Discharge Monitoring Report (DMR) or a Solids Monitoring Form (SMR).

Reporting requirements for Discharge Monitoring Reports (DMRs) are detailed in Section 5. In general, sampling results shall be submitted to Ecology in a DMR within 45 days of the end of each reporting period (quarter) as summarized under permit section S9.A in Table 6 above

## **Annual Reports**

An Annual Report shall be submitted to Ecology no later than May 15<sup>th</sup> of each year. Each annual report shall include the following:

- Corrective action documentation as required in S8.B-D. If corrective action is not yet completed at the time of submission of the annual report, the report must describe the status of any outstanding corrective action(s).
- Identify the condition triggering the need for corrective action review.
- Describe the problem(s) and identify the dates they were discovered.
- Summarize any Level 1, 2 or 3 corrective actions completed during the previous calendar year and include the completion dates.



- Describe the status of any Level 2 or 3 corrective actions triggered during the previous calendar year, and identify the date it expects to complete corrective actions.

### **Non-Compliance Reports**

In the event the Permittee is unable to comply with any of the terms and conditions of the permit which may endanger human health or the environment, or the facility experiences any bypass or upset which causes an exceedance of any effluent limitation in the permit, the Permittee shall:

- Immediately take action to minimize potential pollution or otherwise stop the noncompliance and correct the problem.
- Immediately notify the appropriate Ecology regional office of the failure to comply.
- Submit a detailed written report to Ecology within 5 days unless Ecology requests an earlier submission. The Permittee's report shall contain:
  - A description of the noncompliance, including exact dates and times.
  - Whether the noncompliance has been corrected and, if not, when the noncompliance will be corrected.
  - The steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

**Compliance with the requirements of this section does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.**

### **Recordkeeping**

The following documents shall be maintained onsite for a minimum of five years (the filing location of each document is noted in parentheses):

- A copy of permit (see permit tab of SWPPP).

- A copy of the permit coverage letter (see permit tab of SWPPP).
- Records of all sampling information specified in Condition S4.B.3 (see Appendix B for completed forms).
- Inspection reports including documentation specified in Condition S7 (see Appendix B).
- Any other documentation of compliance with permit requirements (see project file).
- All equipment calibration records (see Appendix B for stormwater sampling forms or laboratory data reports).
- All BMP maintenance records. Maintenance record reports can be run via Maximo for this facility.
- All original recordings for continuous sampling instrumentation (see project file, if applicable).
- Copies of all laboratory reports as described in Condition S3.B.4 (see Appendix B).
- Copies of all reports required by this permit (see Appendix B, project file or additional SWPPP appendices for other reports).
- Records of all data used to complete the application for this permit (see project file).

The period of records retention (five years) shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee, or when requested by Ecology.

### **Ecology Records Request**

All plans, documents and records required by this permit shall be made immediately available to Ecology or the local jurisdiction upon request; or within 14 days of a written request from Ecology.

### **Public Access to SWPPP**

Access to, or a copy of, the SWPPP shall be provided to the public when requested in writing. The following requirements apply upon receiving a written request from the public for the SWPPP:

- Provide a copy of the SWPPP to the requestor within 14 days of receipt of the written request; or
- Notify the requestor within 10 days of receipt of the written request of the location and times within normal business hours when the requestor may view the SWPPP, and provide access to the SWPPP within 14 days of receipt of the written request; or
- Provide a copy of the plans and records to Ecology, where the requestor may view the records, within 14 days of a request; or may arrange with the requestor for an alternative, mutually agreed upon location for viewing and/or copying of the plans and records. If access to the plans and records is provided at a location other than at an Ecology office, the Permittee will provide reasonable access to copying services for which it may charge a reasonable fee.

## Appendix A